

# VMware NSX: Troubleshooting and Operations (NSXTO)

ID NSXTO Price CHF 4,150.—(excl. VAT) Duration 5 days

## Who should attend

- Experienced system administrators and network administrators
- Network and security professionals who work with enterprise networks

## This course is part of the following Certifications

VMware Certified Professional – Network Virtualization (VCP-NV)  
VMware Certified Advanced Professional – Network Virtualization Deploy (VCAP-NV DEPLOY)

## Prerequisites

Before taking this course, you must complete the following course:

- [VMware NSX: Install, Configure, Manage \[V4.0\] \(NSXICM4\)](#)

You should also have understanding or knowledge of these technologies:

- Good understanding of TCP/IP services and protocols
- Knowledge and working experience of computer networking and security, including:
  - Switching and routing technologies (L2 and L3)
  - Network and application delivery services (L4 through L7)
  - Firewalling (L4 through L7)
  - VMware vSphere environments

The VMware Certified Professional – Network Virtualization certification is recommended.

## Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Use the native tools available in NSX to identify and troubleshoot the problems.
- Use VMware Aria Operations for Logs and VMware Aria

- Operations for Networks to identify and troubleshoot problems related to the NSX environment
- Explain the NSX infrastructure components and the communications between them
- Identify, analyze, and troubleshoot problems related to the management, control, and data planes in NSX
- Identify, analyze, and troubleshoot problems related to infrastructure preparation and VMware NSX Edge deployments
- Identify, analyze, and troubleshoot problems related to logical switching and logical routing
- Identify, analyze, and troubleshoot network security problems related to the Distributed firewalls, Gateway firewalls, and Distributed IDS/IPS.
- Identify, analyze, and troubleshoot problems related to VPN and VMware NSX Advanced Load Balancer
- Identify the components and packet flows involved in the NSX datapath and troubleshoot related problems

## Course Content

### 1 Course Introduction

- Introduction and course logistics
- Course objectives

### 2 NSX Operations and Tools

- Explain and validate the native troubleshooting tools for NSX
- Configure syslog, IPFIX, and log collections for the NSX environment
- Integrate NSX with VMware Aria Operations for Logs and VMware Aria Operations for Networks
- Validate and review the API methods available to configure the NSX environment

### 3 Troubleshooting the NSX Management Cluster

- Describe the NSX Management cluster architecture, components, and communication channels
- Identify the workflows involved in configuring the NSX Management cluster
- Validate and troubleshoot the NSX Management cluster formation

## 4 Troubleshooting Infrastructure Preparation

- Describe the data plane architecture, components, and communication channels
- Explain and troubleshoot VMware ESXi transport node preparation issues
- Explain and troubleshoot NSX Edge deployment issues

## 5 Troubleshooting Logical Switching

- Describe the architecture of logical switching
- List the modules and processes involved in configuring logical switching
- Explain the importance of VDS in transport nodes
- Review the architecture and workflows involved in attaching workloads to segments
- Identify and troubleshoot common logical switching issues

## 6 Troubleshooting Logical Routing

- Review the architecture of logical routing
- Explain the workflows involved in the configuration of Tier-0 and Tier-1 gateways
- Explain the high availability modes and validate logical router placements
- Identify and troubleshoot common logical routing issues using both BGP and OSPF

## 7 Troubleshooting Security

- Review the architecture of the Distributed Firewall
- Explain the workflows involved in configuring the Distributed Firewall
- Review the architecture of the Gateway Firewall
- Explain the workflows involved in configuring the Gateway Firewall
- Identify and troubleshoot common Distributed firewall and Gateway Firewall issues
- Review the architecture and workflows involved in configuring Distributed IDS/IPS
- Identify and troubleshoot common Distributed IDS/IPS problems.

## 8 Troubleshooting Services

- Review the NSX Advanced Load Balancer architecture and components
- Identify and troubleshoot common NSX Advanced Load Balancer issues
- Review the IPsec and L2 VPN architecture and components
- Identify and troubleshoot common IPsec and L2 VPN issues

## 9 Datapath Walkthrough

- Verify and validate the path of the packet on the NSX datapath
- Identify and perform packet captures at various points in the datapath
- Use NSX CLI and native hypervisor commands to retrieve configurations involved in the NSX datapath

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## Training Centres worldwide



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